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United States  
Department of  
Agriculture

Soil  
Conservation  
Service

Portland,  
Oregon



in cooperation with

Oregon  
Department of  
Water Resources

# Water Supply Outlook for Oregon

as of JANUARY 1, 1981...





## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: SNOW SURVEYORS MAKING SPECIAL MEASUREMENTS OF THE SNOWPACK  
NEAR MT. ST. HELENS VOLCANO, WASHINGTON, APRIL 1980.

### PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



☆ GPO 796-768

# **WATER SUPPLY OUTLOOK FOR OREGON**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

*Issued*

JANUARY 1, 1981

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DEPARTMENT  
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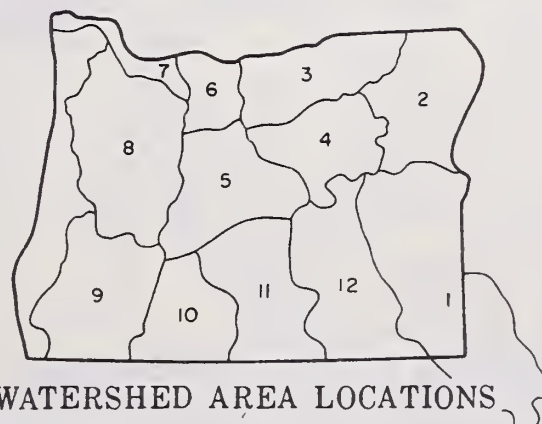
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# WATER SUPPLY OUTLOOK AND SUMMARY FOR OREGON

JANUARY 1, 1981

\*\*\*\*\*  
\*Water supply prospects in Oregon for next summer are forecast to be \*  
\*near normal for all users in the Willamette Valley and for those in \*  
\*the rest of the state with adequate reservoir storage. Other users \*  
\*will have below average supplies. The mountain snowpack is extremely \*  
\*poor. Precipitation has been good but warm temperatures have melted \*  
\* the early snow cover and prevented additional snowpack from building.\*  
\*\*\*\*\*

## SNOW COVER

The mountain snowpack is extremely poor. A high freezing level during December melted much of the snow cover that was on the ground early in the month and caused most of the precipitation to fall as rain. Snow exists only at the highest elevations. Snow cover ranges from 0 to 27% in the Cascades except for the area near Batchelor Butte which is about half of average. The snowpack in eastern Oregon ranges mostly from 0 to 25%. A small area on the headwaters of the Burnt and John Day Rivers is 70% of average.

## PRECIPITATION

Winter precipitation (Nov.-Dec.) has been normal to above except in Harney and Malheur Counties where it was below average. Temperatures were very warm during December and most of the precipitation fell as rain.

## RESERVOIR STORAGE

Twenty-five major irrigation reservoirs were storing 1,672,000 acre feet January 1 compared to a normal of 1,686,000. This is 99% of average. Of these 25 the following reservoirs were storing below average amounts: Cold Springs, Crane Prairie, Crescent Lake, Wickiup, Wasco, Fourmile Lake, Clear Lake (Calif.) and Gerber. The other irrigation reservoirs were near average or above.

## STREAMFLOW

Streamflow was below average at the start of the water year, but heavy rains during December brought flooding to many parts of the state. Streamflow volumes during December were near average on the John Day and Umpqua Rivers, above average on the Grande Ronde and Willamette, and much below average in southern Oregon.

## STREAMFLOW (CONT.)

Forecasts of representative Oregon streams are as follows:

<u>STREAM</u>	<u>PERIOD</u>	<u>FORECAST</u> <u>% of 1963-77 AVG.</u>
Owyhee net Inflow	Feb.-July	74
Malheur nr. Drewsey	Feb.-July	85
Deschutes @ Benham Falls	Apr.-Sept.	70
Grande Ronde @ LaGrande	Mar.-Sept.	70
Willamette Mid. Fk. nr. Oakridge	Apr.-July	86
Upper Klamath Lake net Inflow	Apr.-Sept.	70
Rogue nr. Raygold	Apr.-Sept.	80
Silvies nr. Burns	Mar.-July	85

These forecasts assume normal precipitation and temperatures will occur from January 1 through June. If below normal precipitation and above average temperatures happen during this period streamflows will be less than forecast

The forecasts in this bulletin are a result of coordinated activity between the Soil Conservation Service and the National Weather Service as an effort to provide the best possible service to water users.

This report contains data furnished by the Oregon Department of Water Resources, U.S. Geological Survey, NOAA National Weather Service and other cooperators.



# WATER SUPPLY OUTLOOK

## OWYHEE, MALHEUR WATERSHEDS

### OREGON

#### GENERAL OUTLOOK

The snow cover was much below average on the first of January, ranging from 51% on the Owyhee to 69% on the Malheur watershed. The precipitation over the area was only 86% of normal for December. Spring and summer streamflow is forecast below average except for much below average on Bully Creek. Reservoir storage is above average for this time of year, so there should be no reservoir deficiencies this year. However, there may be shortages for people diverting directly from streams.







## GENERAL OUTLOOK

[illegible]





# WATER SUPPLY OUTLOOK

## UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

### OREGON

#### GENERAL OUTLOOK

The snow pack is very poor. It ranges from 9% to 27% of normal. The precipitation for December was normal, but most of it was in the form of rain since the temperatures have been so warm. Streamflows in the area are forecast to be much below average except for the Walla Walla which is below average. The precipitation will have to be above normal for the rest of the season for these streams to reach normal flows. Reservoir storage is near or below normal for this time of year. Users with impounded water supplies should have adequate water this year, while those diverting directly from streams will experience shortages.

10 0 10 20 30 MILES  
SCALE 1:1,500,000





# WATER SUPPLY OUTLOOK

## UPPER JOHN DAY WATERSHEDS

### OREGON

#### GENERAL OUTLOOK

Snow cover for the Upper John Day basin is below average. The 120% of normal precipitation received during December fell primarily as rain since the temperatures were so warm. The streamflow is forecast to be below normal this spring and summer. Most users diverting from streams will experience shortages this year.







# WATER SUPPLY OUTLOOK

## UPPER DESCHUTES, CROOKED WATERSHEDS

### OREGON

#### GENERAL OUTLOOK

Snow cover is very poor; ranging from 0% on the Crooked and Ochoco watersheds to 59% on the Deschutes above Wickiup. The December precipitation was 112% of normal but fell mainly as rain since the temperatures were so warm. This rain also melted most of the snow which was received earlier. Streamflow will be below normal this spring and summer. Reservoir storage is very poor. Crescent Lake will not fill this year. At present Crescent Lake and Wickiup contain only 39% and 80% of what they should at this time of year. Crane Prairie has only 62% of the amount it should now have. If much above average precipitation does not occur, most users will experience water shortages this year.







# WATER SUPPLY OUTLOOK

## HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

### OREGON

#### GENERAL OUTLOOK

Snow cover is very poor; only 18% of average. The December precipitation was 133% of normal but it fell mainly as rain since the temperatures were very warm. The combined effects of the heavy rains and warm temperatures melted most of the snow which had fallen previously. The streamflows will be below normal this summer.

10 0 10 20 MILES  
SCALE 1:1,000,000





# WATER SUPPLY OUTLOOK LOWER COLUMBIA WATERSHEDS OREGON

## GENERAL OUTLOOK

Spring and summer streamflow for the Columbia River is forecasted to be 97% of normal. Snow cover for the Columbia River basin is below average. There should not be any shortage of hydroelectric power this summer. The Sandy River summer flow is forecasted below average. Users obtaining water directly from streams may experience shortages this summer. This is due to the very poor snowpack on the watershed (only 20% of normal).







# WATER SUPPLY OUTLOOK

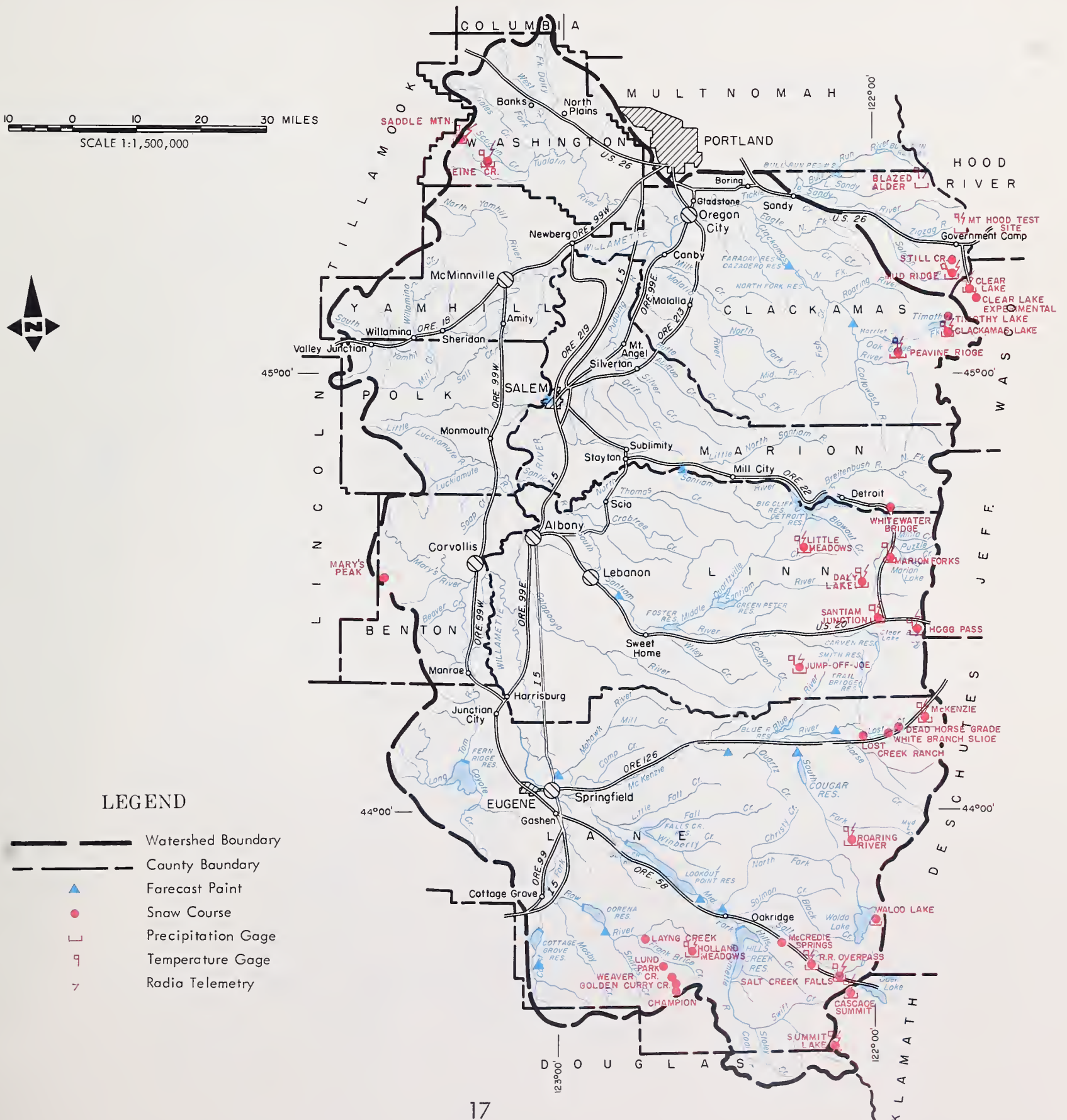
## WILLAMETTE WATERSHEDS

### OREGON

Area 8

#### GENERAL OUTLOOK

Snow cover is extremely poor; ranging from 0% to only 27% of normal. The precipitation during December was 131% of normal, but it fell mainly as rain since the temperatures were so warm. This caused most of the existing snow to melt. Streamflow will be below normal this summer. Most users diverting directly from streams may experience some shortages this summer while those with access to reservoirs should not have any shortages.



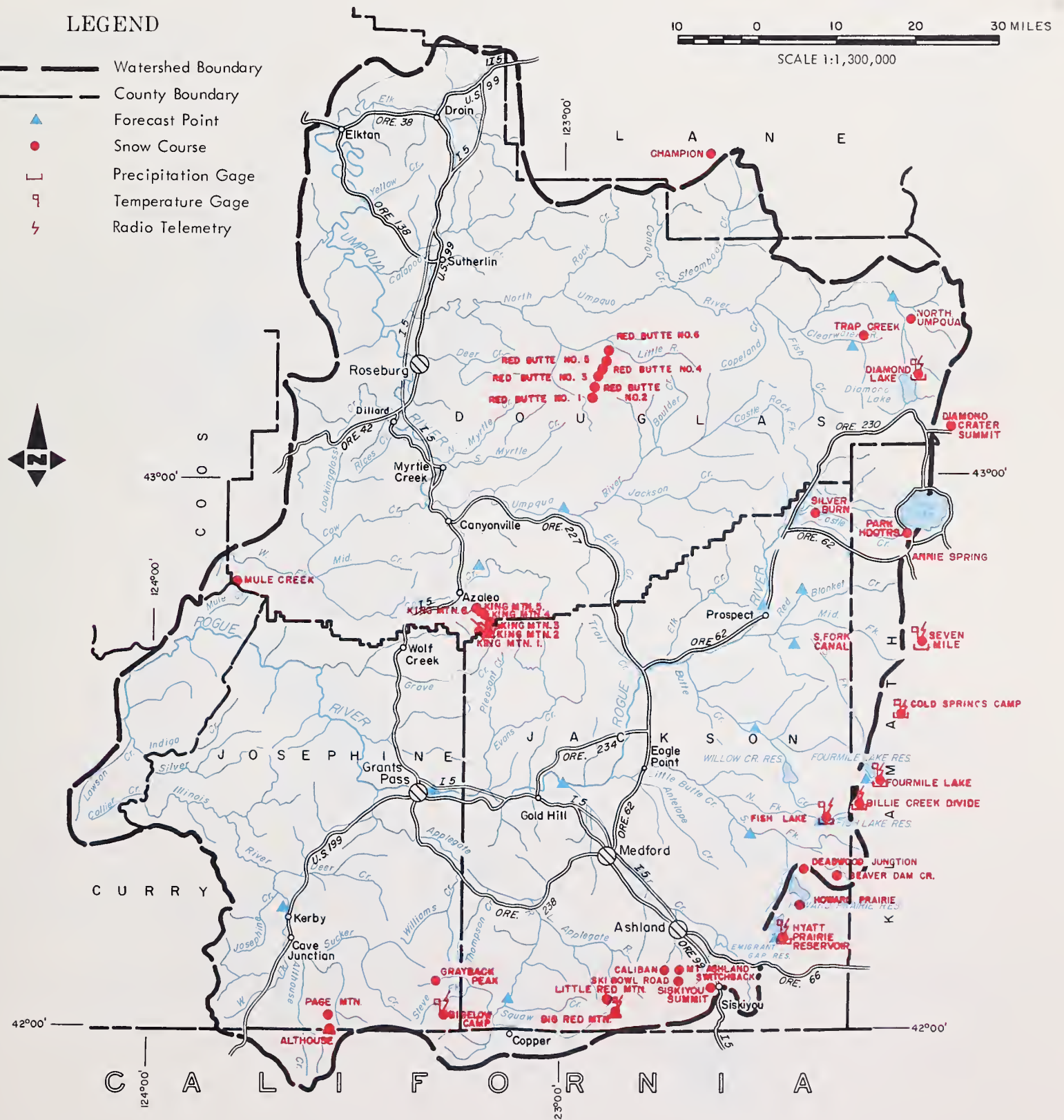




# WATER SUPPLY OUTLOOK ROGUE, UMPQUA, WATERSHEDS OREGON

## GENERAL OUTLOOK

Below normal water supplies are forecast for water users without access to reservoir storage in the Rogue and Umpqua basins. Snow cover exists only at the highest elevations and is much below average. It varies from 0 to 14% of normal. Precipitation during November and December was near normal. Extremely warm temperatures during December were very detrimental to the snowpack.

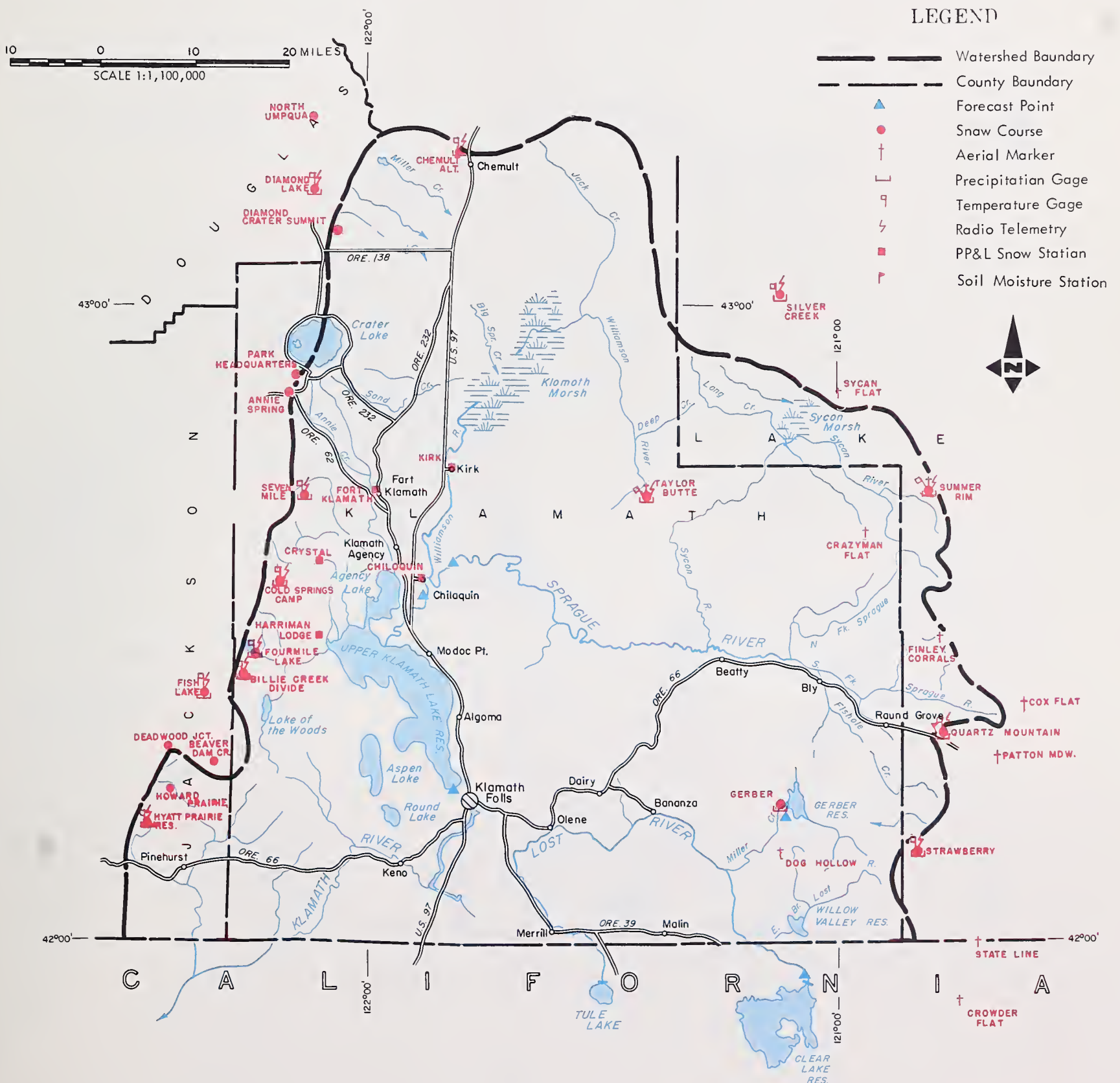




# WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS OREGON

## GENERAL OUTLOOK

Klamath County water users without access to reservoir storage are likely to experience below normal supplies next summer. The mountain snowpack is very poor and varies from 0 on the Lost River to 19% in the rest of the County. Winter precipitation was 79% of normal during November and December.









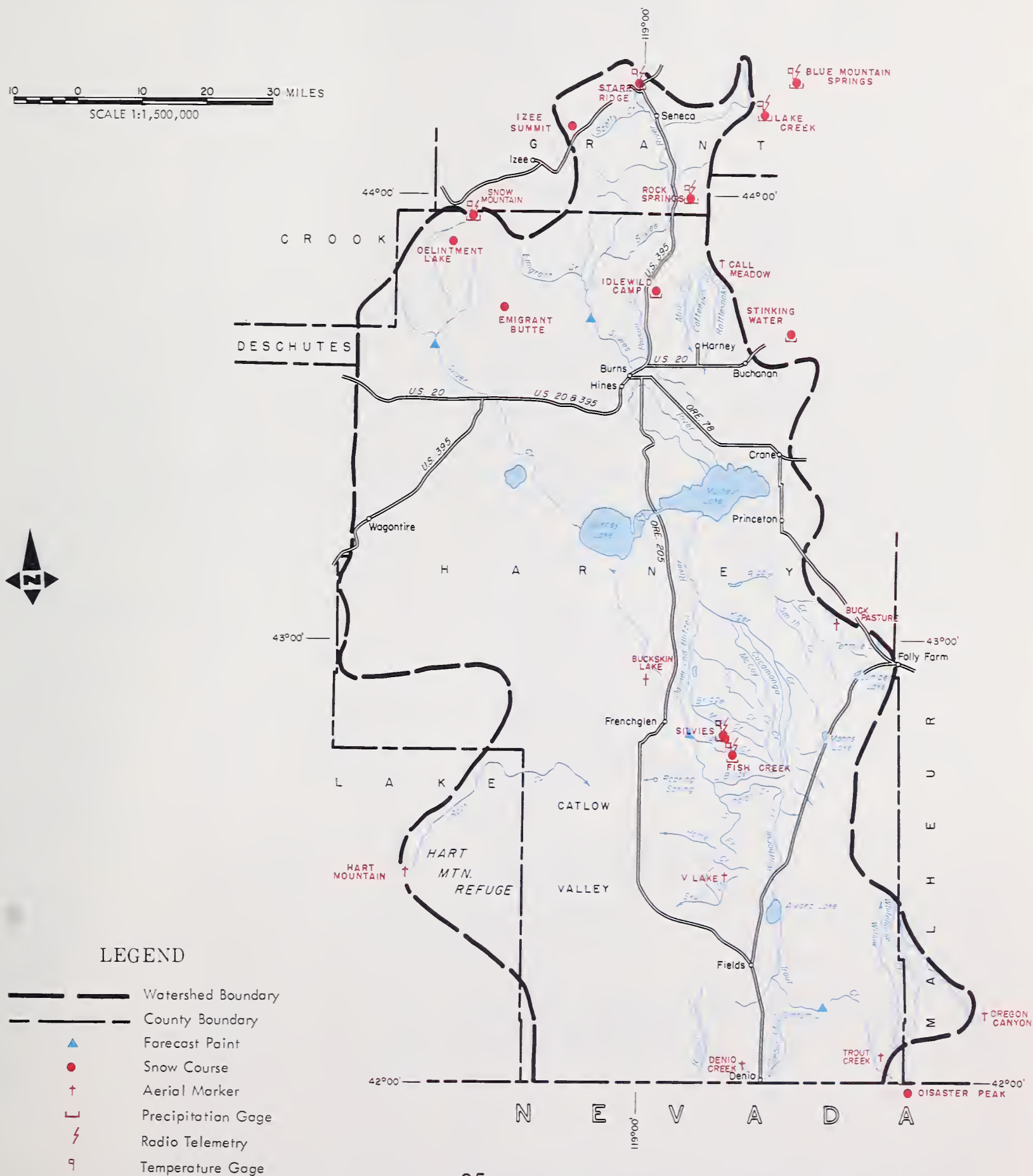




# WATER SUPPLY OUTLOOK HARNEY BASIN WATERSHEDS OREGON

## GENERAL OUTLOOK

The summer water supply outlook for Harney County is below average. The mountain snowpack is very poor except at the highest elevations where it is below average. Precipitation for the winter months (Nov.-Dec.) has been below average. Warm temperatures have been detrimental to snowpack accumulation.





# BASIC DATA SUPPLEMENT 1

JANUARY 1, 1981

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. C
OWYHEE, MALHEUR WATERSHEDS					
Antelope Ridge (Ida.)	1/1	0	0.0	--	--
Battle Creek (Ida.) *		e			
Bear Creek (Nev.)		e			
Big Bend (Nev.)	12/30	--	1.5	a	3.2b
Blue Mountain Springs	12/31	17	6.4	5.6	6.5
Blue Mtn. Spgs. Plw.(T)	N/R			5.9	--
Blue Mtn. Spgs. Plw.(S)	12/31	19	7.0	5.6	6.6b
Blue Mtn. Spgs. Plw.(M)	N/R			4.9	5.4b
Boulder Creek *		e			
Buck Pasture *		e			
Buckskin, Lower (Nev.)		e			
Buckskin, Upper (Nev.)		e			
Bull Basin (Ida.) *		e			
Bully Creek *		e			
Call Meadows *		e			
Columbia Basin (Nev.)		e			
Disaster Peak (Nev.)		e			
Eldorado Pass	12/30	0	0.0	1.6	2.0
Fawn Creek (Nev.)		e			
Fish Creek *		e			
Fish Creek		e			
Fish Creek Pillow(T)	1/1	--	5.5	--	--
Fish Creek Pillow(S)		e			
Fish Creek Pillow(M)		e			
Flag Prairie *		e			
Fox Creek (Nev.)		e			
Fry Canyon (Nev.)	12/30	6	2.2	2.5	3.2
Gold Creek (Nev.)	12/30	0	0.0	--	1.9
Gov't. Corrals		e			
Granite Peak (Nev.)		e			
Hyde Pasture (Ida.) *		e			
Jack Creek, Lower (Nev.)		e			
Jack Creek, Upper (Nev.)		e			
Jack Peak (Nev.)		e			
Lake Creek R.S.	12/31	9	3.0	5.2	4.2
Lake Creek R.S. Plw.(T)	12/30	--	2.5	6.2	--
Lake Creek R.S. Plw.(S)	12/31	12	4.0	6.0	--
Lake Creek R.S. Plw.(M)	12/31	--	2.3	3.5	--
Laurel Draw (Nev.)		e			
Logan Valley *	DISCONTINUED				
Lookout Butte *		e			
Louse Canyon *		e			
Martin Creek (Nev.)		e			
Merritt Mountain (Nev.) *		e			
Midas (Nev.) *		e			
Mud Flat (Ida.)	1/1	5	1.5	--	--
Oregon Canyon *		e			
Quinn Ridge (Nev.) *		e			
Red Canyon (Ida.) *		e			
Rock Springs	12/30	3	0.8	3.4	2.1
Rock Spgs. Plw.(T)	N/R				
Rock Spgs. Plw.(S)	12/30	0	0.0	3.0	--
Rock Spgs. Plw.(M)	12/30	--	0.0	--	--
Rodeo Flat (Nev.)	12/30	3	1.4	2.0	2.8
76 Creek (Nev.) *		e			
Silver City (Ida.)		e			
Silver City (Ida.) *		e			
Silvies *		e			
Silvies		e			
Silvies Pillow (T)	12/30	--	3.0	--	--
Silvies Pillow (S)		e			
Silvies Pillow (M)		e			
South Mountain #2 (Ida.)	1/1	6	3.0	6.6	4.6
South Mtn. #2 Plw.(T)	1/1	--	2.4	5.5	--
Stag Mountain (Nev.) *		e			
Stinking Water	12/30	0	0.0	2.0	1.5
Succor Creek (Ida.) *		e			
Taylor Canyon (Nev.)	12/30	0	0.0	0.6	2.0
Toe Jam (Nev.) *		e			
Tremewan Ranch (Nev.) *	12/30	0	0.0	0.1	1.0b
Trout Creek *		e			
"V" Lake *		e			
Vaught Ranch (Ida.) *		e			
War Eagle (Ida.) *		e			

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. C
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS					
Aneroid Lake #2		e			
Aneroid Lake #2 Plw.(T)	1/1	--	3.8	--	--
Aneroid Lake #2 Plw.(S)		e			
Aneroid Lake #2 Plw.(M)		e			
Anthony Lake	12/29	21	6.7	8.0	11.1
Bald Mountain (OR) *		e			
Beaver Reservoir (Rev.)	1/1	0	0.0	3.2	5.4b
Beaver Res. Pillow(T)	N/R				
Beaver Res. Pillow (S)	1/1	0	0.0	2.3	--
Beaver Res. Pillow(M)	N/R				
Big Sheep *		e			
Blue Mtn. Summit	N/R			3.2	3.5
Bourne		e			
Bourne Pillow (T)	1/1	--	6.0	--	--
Bourne Pillow (S)		e			
Bourne Pillow (M)		e			
County Line	12/29	0	0.0	1.5	--
County Line (Rev.)	12/29	0	0.0	--	1.9
County Line Pillow (T)	12/29	--	0.0	--	--
County Line Pillow (S)	12/29	0	0.0	0.4	--
County Line Pillow (M)	12/29	--	0.0	0.0	--
Dooley Mountain	12/30	6	1.9	3.4	3.8
Eilertson Meadows	12/30	6	1.8	4.2	4.5
Eilertson Mdw. Plw.(T)	N/R				
Eilertson Mdw. Plw.(S)	12/30	4	1.2	4.1	--
Eilertson Mdw. Plw.(M)	12/30	--	0.7	2.2	--
Eldorado Pass	12/30	0	0.0	1.6	2.0
Gold Center	12/30	11	3.5	4.7	5.0b
Gold Center Pillow (T)	N/R				
Gold Center Pillow (S)	12/30	8	2.2	3.8	--
Gold Center Pillow (M)	12/30	--	1.7	2.6	--
Goodrich Lake		e			
Little Alps	12/29	5	1.1	3.4	5.4
Little Antone	DISCONTINUED				
Little Antone (Alt.)	12/29	9	3.0	3.9	--
Lucky Strike	12/29	1	0.2	2.7	--
Lucky Strike Pillow (T)	12/29	--	0.0	1.5	--
Lucky Strike Pillow (S)	12/29	0	0.0	1.8	--
Lucky Strike Pillow (M)	12/29	--	0.0	0.6	--
Meacham	DISCONTINUED				
Mirror Lake *		e			
Moss Spring		e			
Moss Spring Pillow (T)	1/1	--	5.5	--	--
Moss Spring Pillow (S)		e			
Moss Spring Pillow (M)		e			
Mt. Howard Pillow (T)	1/1	--	3.6	--	--
Mt. Howard Pillow (S)		e			
Mt. Howard Pillow (M)		e			
Schneider Meadow		e			
Schneider Meadow Plw.(T)	1/1	--	5.4	--	--
Schneider Meadow Plw.(S)		e			
Schneider Meadow Plw.(M)		e			
Schoolmarm	DISCONTINUED				
Standley *		e			
Taylor Green		e			
Taylor Green Pillow (T)	1/1	--	4.6	--	--
Taylor Green Pillow (S)		e			
Taylor Green Pillow (M)		e			
Tipton	N/R			3.5	4.7
Tipton Pillow (T)	1/1	--	3.2	3.7	--
Tipton Pillow (S)	N/R			4.0	6.6b
Tipton Pillow (M)	N/R				
Tollgate	DISCONTINUED				
TV Ridge *		e			
West Eagle Meadows *		e			
Wolf Creek Pillow (T)	1/1	--	4.5	--	--
Wolf Creek Pillow (S)		e			
Wolf Creek Pillow (M)		e			

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# BASIC DATA SUPPLEMENT 1

JANUARY 1, 1981

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS					
Brooks Meadow		<i>e</i>			
Clear Lake	12/30	0	0.0	1.0	3.3
Clear Lake Pillow (T)	N/R				
Clear Lake Pillow (S)	12/30	0	0.0	2.8	--
Clear Lake Pillow (M)	12/30	--	0.0	--	--
Clear Lake Expt.	12/30	0	0.0	2.8	5.7
Greenpoint		<i>e</i>			
Greenpoint Pillow (T)	N/R				
Greenpoint Pillow (S)		<i>e</i>			
Greenpoint Pillow (M)		<i>e</i>			
Mt. Hood Test Site (T)	N/R			18.8	24.3 <sup>b</sup>
Mt. Hood Test Site (S)	12/30	16	6.5	20.4	21.2 <sup>b</sup>
Mt. Hood Test Site (M)	12/30	--	6.9	--	--
Mud Ridge Pillow (T)	12/30	--	1.2	5.9	--
Mud Ridge Pillow (S)	12/30	3	1.2	6.5	11.3
Mud Ridge Pillow (M)	N/R			6.2	--
Red Hill		<i>e</i>			
Red Hill Pillow (T)	1/1	--	0.0	--	--
Red Hill Pillow (S)		<i>e</i>			
Red Hill Pillow (M)		<i>e</i>			
Still Creek	12/29	0	0.0	3.8	8.5
Switchback		<i>e</i>			
Tilly Jane		<i>e</i>			
LOWER COLUMBIA WATERSHED					
Blazed Alder Pillow (T)	12/31	--	0.0	--	--
Blazed Alder Pillow (S)	12/31	0	0.0	--	--
Blazed Alder Pillow (M)	12/31	--	0.0	--	--
Mt. Hood Test Site (T)	N/R			18.8	24.3 <sup>b</sup>
Mt. Hood Test Site (S)	12/30	16	6.5	20.4	21.2 <sup>b</sup>
Mt. Hood Test Site (M)	12/30	--	6.9	--	--
Mud Ridge Pillow (T)	12/30	--	1.2	5.9	--
Mud Ridge Pillow (S)	12/30	3	1.2	6.5	11.3
Mud Ridge Pillow (M)	N/R			6.2	--
North Fork Res. (T)	1/1	--	0.0	1.7	--
North Fork Res. (S)	1/6	0	0.0	--	--
North Fork Res. (M)	1/6	--	0.0	--	--
Still Creek	12/29	0	0.0	3.8	8.5
WILLAMETTE WATERSHEDS					
Cascade Summit	12/30	9	2.7	5.6	11.1
Cascade Summit Plw. (T)	N/R				
Cascade Summit Plw. (S)	12/30	15	4.9	7.4	--
Cascade Summit Plw. (M)	12/30	--	4.2	5.4	--
Champion	12/30	0	0.0	4.4	12.4
Clackamas Lake		<i>e</i>			
Clackamas Lake Plw. (T)	N/R				
Clackamas Lake Plw. (S)		<i>e</i>			
Clackamas Lake Plw. (M)		<i>e</i>			
Clear Lake	12/30	0	0.0	1.0	3.3
Clear Lake Plw. (T)	N/R				
Clear Lake Plw. (S)	12/30	0	0.0	2.8	--
Clear Lake Plw. (M)	12/30	--	0.0	--	--
Clear Lake Expt.	12/30	0	0.0	2.8	5.7

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
WILLAMETTE WATERSHEDS (CONT.)					
Daly Lake Plw. (T)	12/29	--	0.0	--	--
Daly Lake Plw. (S)	12/29	0	0.0	1.2	--
Daly Lake Plw. (M)	12/29	--	0.0	1.7	--
Dead Horse Grade	12/29	0	0.0	1.3	6.0
Golden Curry Creek	12/30	0	0.0	0.0	2.2
Hogg Pass	12/31	10	3.3	5.4	14.8
Hogg Pass Pillow (T)	1/1	--	5.1	6.3	--
Hogg Pass Pillow (S)	12/31	13	4.3	6.5	--
Hogg Pass Pillow (M)	12/31	--	5.0	6.2	--
Holland Meadows Plw. (T)	N/R				
Holland Meadows Plw. (S)	12/29	0	0.0	--	--
Holland Meadows Plw. (M)	12/29	--	0.0	--	--
Jump Off Joe Pillow (T)	N/R			2.1	--
Jump Off Joe Pillow (S)	12/31	0	0.0	2.0	--
Jump Off Joe Pillow (M)	12/31	--	0.0	1.2	--
Layng Creek	12/30	0	0.0	0.0	--
Little Meadows Plw. (T)	N/R				
Little Meadows Plw. (S)	12/29	0	0.0	5.0	--
Little Meadows Plw. (M)	12/29	--	0.0	--	--
Lost Creek Ranch	12/29	0	0.0	0.0	1.8
Lund Park	12/30	0	0.0	0.0	--
Marion Forks	12/31	0	0.0	0.1	4.5
Marion Forks Pillow (T)	N/R				
Marion Forks Pillow (S)	12/29	18	7.3	0.1	--
Marion Forks Pillow (M)	12/29	--	5.8	0.8	--
Marys Peak		<i>e</i>			
McCredie Springs	12/30	0	0.0	0.0	0.5 <sup>b</sup>
McKenzie	12/29	17	7.6	8.5	19.3
McKenzie Pillow (T)	N/R				
McKenzie Pillow (S)	12/29	18	7.3	7.3	--
McKenzie Pillow (M)	12/29	--	5.8	--	--
Mt. Hood Test Site (T)	N/R			18.8	24.3 <sup>b</sup>
Mt. Hood Test Site (S)	12/30	16	6.5	20.4	21.2 <sup>b</sup>
Mt. Hood Test Site (M)	12/30	--	6.9	--	--
Peavine Ridge Pillow (T)	N/R			--	4.9 <sup>b</sup>
Peavine Ridge Pillow (S)	12/31	0	0.0	--	--
Peavine Ridge Pillow (M)	12/31	--	0.0	--	--
Railroad Overpass	12/30	0	0.0	0.0	1.3 <sup>b</sup>
Railroad Overpass Plw. (T)	N/R				
Railroad Overpass Plw. (S)	12/30	0	0.0	0.0	--
Railroad Overpass Plw. (M)	12/30	--	0.0	0.0	--
Roaring River Plw. (T)	12/29	--	2.7	--	--
Roaring River Plw. (S)	12/29	7	2.2	5.2	--
Roaring River Plw. (M)	12/29	--	2.5	4.0	--
Saddle Mtn. Pillow (T)	1/1	--	0.0	1.2	--
Salt Creek Falls	12/30	0	0.0	0.8	5.6
Salt Creek Falls Plw. (T)	12/30	--	1.0	--	--
Salt Creek Falls Plw. (S)	12/30	3	1.4	3.5	--
Salt Creek Falls Plw. (M)	12/30	--	1.0	2.2	--
Santiam Junction	12/31	0	0.0	2.5	9.3
Santiam Junction Plw. (T)	N/R			3.7	--
Santiam Junction Plw. (S)	12/31	0	0.0	3.4	--
Santiam Junction Plw. (M)	12/31	--	0.0	4.1	--
Seine Creek Pillow (T)	N/R			0.0	--
Still Creek	12/29	0	0.0	3.8	8.5
Summit Lake Pillow (T)	N/R				
Summit Lake Pillow (S)		<i>e</i>			
Summit Lake Pillow (M)		<i>e</i>			
Timothy Lake	N/R			--	6.0 <sup>b</sup>
Waldo Lake	DISCONTINUED				
Weaver Creek	12/30	0	0.0	0.0	0.4 <sup>b</sup>
White Branch Slide	12/29	0	0.0	0.1	2.8
Whitewater Bridge	12/31	0	0.0	0.0	2.1 <sup>b</sup>

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

# BASIC DATA SUPPLEMENT 1

JANUARY 1, 1981

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS					
Arbuckle Mountain	12/29	0	0.0	3.3	--
Arbuckle Mtn. Plw.(T)	12/29	--	2.4	7.1	--
Arbuckle Mtn. Plw.(S)	12/29	12	3.5	6.6	--
Arbuckle Mtn. Plw.(M)	12/29	--	2.3	7.4	--
Blue Mountain Camp	12/29	0	0.0	3.2	6.2
Bowman Springs Plw.(T)	12/29	--	1.6	3.3	--
Bowman Springs Plw.(S)	12/29	2	0.5	2.5	--
Bowman Springs Plw.(M)	12/29	--	1.4	2.1	--
Butte Creek Summit	N/R				
Emigrant Springs	12/29	0	0.0	0.5	2.6
Emigrant Springs Plw.(T)	N/R				
Emigrant Springs Plw.(S)	12/29	0	0.0	0.5	--
Emigrant Springs Plw.(M)	12/29	--	0.0	0.0	--
High Ridge Pillow (T)	N/R			6.1	--
High Ridge Pillow (S)	12/31	13	5.1	7.6	14.4
High Ridge Pillow (M)	N/R			5.8	--
Lucky Strike	12/29	1	0.2	2.7	--
Lucky Strike Plw.(T)	12/29	--	0.0	1.5	--
Lucky Strike Plw.(S)	12/29	0	0.0	1.8	--
Lucky Strike Plw.(M)	12/29	--	0.0	0.6	--
Madison Butte Pillow(T)	N/R				
Madison Butte Pillow(S)	12/29	0	0.0	1.1	--
Madison Butte Pillow(M)	12/29	--	0.0	0.5	--
Meacham	DISCONTINUED				
Tollgate	DISCONTINUED				
UPPER JOHN DAY WATERSHEDS					
Anthony Lake	12/29	21	6.7	8.0	11.1
Arbuckle Mountain	12/29	0	0.0	3.3	--
Arbuckle Mtn. Plw.(T)	12/29	--	2.4	7.1	--
Arbuckle Mtn. Plw.(S)	12/29	12	3.5	6.6	--
Arbuckle Mtn. Plw.(M)	12/29	--	2.3	7.4	--
Blue Mountain Springs	12/31	17	6.4	5.6	6.5
Blue Mtn. Spgs. Plw.(T)	N/R			5.9	--
Blue Mtn. Spgs. Plw.(S)	12/31	19	7.0	5.6	6.6b
Blue Mtn. Spgs. Plw.(M)	N/R			4.9	5.4b
Blue Mountain Summit	N/R			3.2	3.5
Butte Creek Summit	N/R				
Derr		e			
Derr Pillow (T)	1/1	--	0.0	--	--
Derr Pillow (S)		e			
Derr Pillow (M)		e			
Gold Center	12/30	11	3.5	4.7	5.0b
Gold Center Plw.(T)	N/R				
Gold Center Plw.(S)	12/30	8	2.2	3.8	--
Gold Center Plw.(M)	12/30	--	1.7	2.6	--
Izee Summit	12/30	5	1.8	4.0	3.2
Lucky Strike	12/29	1	0.2	2.7	--
Lucky Strike Plw.(T)	12/29	--	0.0	1.5	--
Lucky Strike Plw.(S)	12/29	0	0.0	1.8	--
Lucky Strike Plw.(M)	12/29	--	0.0	0.6	--
Marks Creek	12/29	0	0.0	0.1	2.1b
Ochoco Meadows		e			
Ochoco Mdws. Plw.(T)	N/R				
Ochoco Mdws. Plw.(S)		e			
Ochoco Mdws. Plw.(M)		e			
Olive Lake *	DISCONTINUED				
Schoolmarm	DISCONTINUED				
Snow Mountain		e			
Snow Mtn. Plw. (T)	1/1	--	1.5	--	--
Snow Mtn. Plw. (S)		e			
Snow Mtn. Plw. (M)		e			
Starr Ridge	12/30	2	0.8	3.7	2.6b
Starr Ridge Plw. (T)	N/R				
Starr Ridge Plw. (S)	12/30	5	1.0	4.0	--
Starr Ridge Plw. (M)	N/R				
Tipton	N/R			3.5	4.7
Tipton Pillow (T)	1/1	--	3.2	3.7	--
Tipton Pillow (S)	N/R			4.0	6.6b
Tipton Pillow (M)	N/R				

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
UPPER DESCHUTES, CROOKED WATERSHEDS					
Bald Peter	N/R			8.2	13.1b
Caldwell Ranch		e			
Cascade Summit	12/30	9	2.7	5.6	11.1
Cascade Summit Plw.(T)	N/R				
Cascade Summit Plw.(S)	12/30	15	4.9	7.4	--
Cascade Summit Plw.(M)	12/30	--	4.2	5.4	--
Chemult Alternate	1/5	4	1.1	4.4	4.9b
Chemult Alt. Plw. (T)	N/R				
Chemult Alt. Plw. (S)	1/5	0	0.0	--	--
Chemult Alt. Plw. (M)	1/5	--	0.0	--	--
Derr		e			
Derr Pillow (T)	1/1	--	0.0	--	--
Derr Pillow (S)		e			
Derr Pillow (M)		e			
Hogg Pass	12/31	10	3.3	5.4	14.8
Hogg Pass Pillow (T)	1/1	--	5.1	6.3	--
Hogg Pass Pillow (S)	12/31	13	4.3	6.5	--
Hogg Pass Pillow (M)	12/31	--	5.0	6.2	--
Hungry Flat	12/31	0	0.0	1.0	3.3b
Irish-Taylor Pillow(T)	1/1	--	7.4	--	--
Irish-Taylor Pillow(S)		e			
Irish-Taylor Pillow(M)		e			
Lionshead *	12/29	0	0.0	1.6	--
Marks Creek	12/29	0	0.0	0.1	2.1b
New Crescent Lake		e			
New Crescent Lake Plw.(T)	N/R				
New Crescent Lake Plw.(S)		e			
New Crescent Lake Plw.(M)		e			
New Dutchman Flat #2	12/31	32	13.2	18.8	22.5b
Ochoco Meadows		e			
Ochoco Meadows Plw.(T)	N/R				
Ochoco Meadows Plw.(S)		e			
Ochoco Meadows Plw.(M)		e			
Racing Creek	12/29	0	0.0	2.2	5.4b
Snow Mountain		e			
Snow Mountain Plw.(T)	1/1	--	1.5	--	--
Snow Mountain Plw.(S)		e			
Snow Mountain Plw.(M)		e			
Summit Lake Pillow (T)	N/R				
Summit Lake Pillow (S)		e			
Summit Lake Pillow (M)		e			
Tamarack		e			
Tangent	12/31	14	5.2	6.5	9.2
Three Creek Butte		e			
Three Creek Meadow		e			
Three Creek Mdw. Plw.(T)	N/R				
Three Creek Mdw. Plw.(S)		e			
Three Creek Mdw. Plw.(M)		e			
Wlado Lake	DISCONTINUED				
Whitewater Meadow *	12/29	0	0.0	0.8	--

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# BASIC DATA SUPPLEMENT 1

JANUARY 1, 1981

SNOW						SNOW					
DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD		DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)			Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. C					Last Yr.	Ave. C
ROGUE, UMPQUA WATERSHEDS						KLAMATH WATERSHEDS					
Althouse		e				Annie Spring	1/6	23	11.7	16.6	17.6
Annie Spring	1/6	23	11.7	16.6	17.6	Billie Creek Divide	1/5	4	1.6	6.0	8.6
Beaver Dam Creek	1/2	0	0.0	4.5	6.1	Billie Cr. Div. Plw.(T)	1/5	--	4.4	7.0	--
Bigelow Camp Plw(T)	N/R					Billie Cr. Div. Plw.(S)	1/5	10	3.2	7.7	--
Bigelow Camp Plw(S)		e				Billie Cr. Div. Plw.(M)	1/5	--	4.3	6.1	--
Bigelow Camp Plw(M)		e				Chemult Alternate	1/5	4	1.1	4.4	4.9 b
Big Red Mountain		e				Chemult Alternate Plw.(T)	N/R				
Big Red Mtn. Plw.(T)	N/R					Chemult Alternate Plw.(S)	1/5	0	0.0	--	--
Big Red Mtn. Plw.(S)		e				Chemult Alternate Plw.(M)	1/5	--	0.0	--	--
Big Red Mtn. Plw.(M)		e				Chiloquin (PP&L)	N/R			--	0.5 b
Billie Creek Divide	1/5	4	1.6	6.0	8.6	Cold Springs Camp		e			
Billie Cr. Div. Plw.(T)	1/5	--	4.4	7.0	--	Cold Spgs. Camp Plw.(T)	N/R				
Billie Cr. Div. Plw.(S)	1/5	10	3.2	7.7	--	Cold Spgs. Camp Plw.(S)		e			
Billie Cr. Div. Plw.(M)	1/5	--	4.3	6.1	--	Cold Spgs. Camp Plw.(M)		e			
Caliban		e				Crazyman Flat *		e			
Caliban (Alternate)		e				Crowder Flat (Calif.) *		e			
Champion	12/30	0	0.0	4.4	12.4	Crystal (PP&L)	1/2	0	0.0	3.1	4.1 b
Cold Springs Camp		e				Diamond-Crater Summit	12/29	14	5.5	7.0	11.7
Cold Spgs. Camp Plw. (T)	N/R					Dog Hollow *		e			
Cold Spgs. Camp Plw. (S)		e				Finley Corrals *		e			
Cold Spgs. Camp Plw. (M)		e				Fork Klamath (PP&L)	1/2	0	0.0	1.9	1.8 b
Deadwood Junction	1/2	0	0.0	3.9	4.3b	Fourmile Lake		e			
Diamond-Crater Summit	12/29	14	5.5	7.0	11.7	Fourmile Lake Plw. (T)	1/1	--	6.4	--	--
Diamond Lake	12/29	3	0.7	3.7	7.6	Fourmile Lake Plw. (S)		e			
Diamond Lake Plw. (T)	N/R					Fourmile Lake Plw. (M)		e			
Diamond Lake Plw. (S)	12/29	0	0.0	3.4	--	Gerber	1/5	0	0.0	1.5	1.1
Diamond Lake Plw. (M)	12/29	--	0.0	1.6	--	Harriman (PP&L)	1/2	0	0.0	1.6	2.3 b
Fish Lake	1/5	3	1.1	5.5	5.5b	Howard Prairie	1/2	0	0.0	3.7	4.0
Fish Lake Pillow (T)	N/R					Hyatt Prairie Reservoir	1/2	0	0.0	3.2	4.0
Fish Lake Pillow (S)	1/5	0	0.0	7.0	--	Hyatt Prairie Res.Plw.(T)	N/R				
Fish Lake Pillow (M)	N/R			0.5	--	Hyatt Prairie Res.Plw.(S)	1/2	0	0.0	--	--
Fourmile Lake		e				Hyatt Prairie Res.Plw.(M)	1/2	--	0.0	2.4	--
Fourmile Lake Pillow (T)	1/1	--	6.4	--	--	Kirk (PP&L)	N/R			2.4	3.4 b
Fourmile Lake Pillow (S)		e				Park Headquarters	1/6	38	18.0	21.3	25.2
Fourmile Lake Pillow (M)		e				Quartz Mountain	12/30	0	0.0	4.0	2.3
Grayback Peak		e				Quartz Mtn. Pillow (T)	N/R				
Howard Prairie Reservoir	1/2	0	0.0	3.7	4.0	Quartz Mtn. Pillow (S)	12/30	0	0.0	4.2	--
Hyatt Prairie	1/2	0	0.0	3.2	4.0	Quartz Mtn. Pillow (M)	12/30	--	0.0	2.6	--
Hyatt Prairie Pillow (T)	N/R					Seven Mile		e			
Hyatt Prairie Pillow (S)	1/2	0	0.0	--	--	Seven Mile Pillow(T)	N/R				
Hyatt Prairie Pillow (M)	1/2	--	0.0	2.4	--	Seven Mile Pillow(S)		e			
King Mountain #1	12/29	0	0.0	4.2	5.7b	Seven Mile Pillow(M)		e			
King Mountain #2	12/29	0	0.0	4.0	3.6b	State Line (Calif.) *		e			
King Mtn. #2 Plw.(T)	N/R					Strawberry		e			
King Mtn. #2 Plw.(S)	12/29	0	0.0	--	--	Strawberry Pillow (T)	N/R				
King Mtn. #2 Plw.(M)	12/29	--	0.0	--	--	Strawberry Pillow (S)		e			
King Mountain #3	12/29	0	0.0	2.2	1.9b	Strawberry Pillow (M)		e			
King Mountain #4	12/29	0	0.0	0.8	0.2b	Summer Rim *		e			
King Mountain #5	12/29	0	0.0	0.0	0.1b	Summer Rim		e			
King Mountain #6	12/29	0	0.0	0.0	0.1b	Summer Rim Pillow (T)	1/1	--	4.0	--	--
Little Red Mountain	DISCONTINUED					Summer Rim Pillow (S)		e			
Mt. Ashland Switchback		e				Summer Rim Pillow (M)		e			
Mule Creek	12/29	0	0.0	2.1	4.6b	Sycan Flat *		e			
North Umpqua	12/31	1	0.3	2.7	6.4	Taylor Butte	12/29	1	0.3	2.6	1.9
Page Mountain		e				Taylor Butte Pillow (T)	12/29	--	1.3	3.7	--
Park Headquarters	1/6	38	18.0	21.3	25.2	Taylor Butte Pillow (S)	12/29	3	0.8	2.8	--
Red Butte #1	12/29	0	0.0	2.2	5.2b	Taylor Butte Pillow (M)	12/29	--	0.9	3.0	--
Red Butte #2	12/29	0	0.0	3.2	3.0						
Red Butte #3	12/29	0	0.0	2.0	1.8b						
Red Butte #4	12/29	0	0.0	0.0	1.1b						
Red Butte #5	12/29	0	0.0	0.0	1.5b						
Red Butte #6	12/29	0	0.0	0.0	0.4b						
Seven Mile		e									
Seven Mile Pillow (T)	N/R										
Seven Mile Pillow (S)		e									
Seven Mile Pillow (M)		e									
Silver Burn	12/31	0	0.0	4.0	6.1						
Siskiyou Summit	1/5	0	0.0	3.0	3.2b						
Ski Bowl Road		e									
South Fork Canal	12/31	0	0.0	0.0	2.0						
Trap Creek	12/31	0	0.0	1.7	5.6						

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# BASIC DATA SUPPLEMENT 1

JANUARY 1, 1981

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
LAKE COUNTY, GOOSE LAKE WATERSHEDS					
Adin Mountain (Calif.)		e			
Bald Mountain (Nev.)		e			
Bear Flat Meadow *		e			
Camas Creek #1	1/5	0	0.0	4.3	3.4
Camas Creek #2	1/5	0	0.0	5.4	--
Cedar Pass (Calif.)		e			
Colvin Creek *		e			
Cox Flat *		e			
Crowder Flat (Calif.) *		e			
Dismal Swamp (Calif.) *		e			
Dismal Swamp #2 Plw.(T)	12/31	--	6.7	--	--
Dismal Swamp #2 Plw.(S)		e			
Dismal Swamp #2 Plw.(M)		e			
Finley Corrals *		e			
Hart Mountain *		e			
Little Bally Mtn.(Nev.)		e			
Mt. Bidwell (Calif.)		e			
North Star (Calif.)		e			
Patton Meadows *		e			
Quartz Mountain	12/30	0	0.0	4.0	2.3
Quartz Mountain Plw.(T)	N/R				
Quartz Mountain Plw.(S)	12/30	0	0.0	4.2	--
Quartz Mountain Plw.(M)	12/30	--	0.0	2.6	--
Rogger Meadows *		e			
Sherman Valley *		e			
Silver Creek	12/31	0	0.0	1.0	1.0
Silver Creek Plw.(T)	1/1	--	2.0	--	--
Silver Creek Plw.(S)	N/R				
Silver Creek Plw.(M)	N/R				
State Line (Calif.) *		e			
Strawberry		e			
Strawberry Plw.(T)	N/R				
Strawberry Plw.(S)		e			
Strawberry Plw.(M)		e			
Summer Rim *		e			
Summer Rim		e			
Summer Rim Plw.(T)	1/1	--	4.0	--	--
Summer Rim Plw.(S)		e			
Summer Rim Plw.(M)		e			
Sycan Flat *		e			

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
HARNEY BASIN WATERSHEDS					
Blue Mountain Springs	12/31	17	6.4	5.6	6.5
Blue Mtn. Spgs. Plw.(T)	N/R			5.9	--
Blue Mtn. Spgs. Plw.(S)	12/31	19	7.0	5.6	6.6 <sup>b</sup>
Blue Mtn. Spgs. Plw.(M)	N/R			4.9	5.4 <sup>b</sup>
Buck Pasture *		<i>e</i>			
Buckskin Lake *		<i>e</i>			
Call Meadows *		<i>e</i>			
Delintment Lake		<i>e</i>			
Denio Creek *		<i>e</i>			
Disaster Peak (Nev.)		<i>e</i>			
Emigrant Butte		<i>e</i>			
Fish Creek *		<i>e</i>			
Fish Creek		<i>e</i>			
Fish Creek Plw.(T)	1/1	--	5.5	--	--
Fish Creek Plw.(S)		<i>e</i>			
Fish Creek Plw.(M)		<i>e</i>			
Gov't. Corrals		<i>e</i>			
Hart Mountain *		<i>e</i>			
Idlewild Camp Alt.	12/31	0	0.0	2.2	2.4 <sup>b</sup>
Izee Summit	12/30	5	1.8	4.0	3.2
Lake Creek R.S.	12/31	9	3.0	5.2	4.2
Lake Creek R.S. Plw.(T)	12/30	--	2.5	6.2	--
Lake Creek R.S. Plw.(S)	12/31	12	4.0	6.0	--
Lake Creek R.S. Plw.(M)	12/31	--	2.3	3.5	--
Oregon Canyon *		<i>e</i>			
Rock Springs	12/30	3	0.8	3.4	2.1
Rock Springs Plw.(T)	N/R				
Rock Springs Plw.(S)	12/30	0	0.0	3.0	--
Rock Springs Plw.(M)	12/30	--	0.0	--	--
Silvies *		<i>e</i>			
Silvies		<i>e</i>			
Silvies Plw.(T)	12/30	--	3.0	--	--
Silvies Plw.(S)		<i>e</i>			
Silvies Plw.(M)		<i>e</i>			
Snow Mountain		<i>e</i>			
Snow Mountain Plw.(T)	1/1	--	1.5	--	--
Snow Mountain Plw.(S)		<i>e</i>			
Snow Mountain Plw.(M)		<i>e</i>			
Starr Ridge	12/30	2	0.8	3.7	2.6 <sup>b</sup>
Starr Ridge Pillow (T)	N/R				
Starr Ridge Pillow (S)	12/30	5	1.0	4.0	--
Starr Ridge Pillow (M)	N/R				
Stinking Water	12/30	0	0.0	2.0	1.5
Trout Creek *		<i>e</i>			
"V" Lake *		<i>e</i>			

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# BASIC DATA SUPPLEMENT 2

JANUARY 1, 1981

## PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precipitation	Last Year	Average <sup>c</sup>
Little Meadows (Linn County)	4000	From 11/12 To 12/29	39.96"		
Lucky Strike (Umatilla County)	5050	From 7/23 To 12/29	10.50"		
Madison Butte (Morrow County)	5250	From 9/11 To 12/29	5.52"		
Marion Forks (Linn County)	2730	From 11/12 To 12/31	29.04"		
Marks Creek (Crook County)	4540	From 12/1 To 12/29	3.75"		
McKenzie (Lane County)	5000	From 11/7 To 12/29	28.92"		
Mt. Hood Test Site (Clackamas County)	5400	From 9/12 To 12/30	37.69"		
Mud Ridge (Clackamas County)	4050	From 6/17 To 12/30	28.32"		
North Fork Reservoir (Multnomah County)	3120	From 6/26 To 1/6	59.17"		
Peavine Ridge (Clackamas County)	3500	From 10/16 To 12/31	25.44"		
Quartz (Lake County)	6300	From 10/23 To 12/30	4.44"		
Railroad Overpass (Lane County)	2750	From 10/24 To 12/30	18.84"		
Roaring River (Lane County)	4900	From 8/26 To 12/29	21.84"		
Rock Springs (Grant County)	5100	From 10/30 To 12/30	3.84"		
Salt Creek Falls (Lane County)	4000	From 11/6 To 12/30	25.68"		
Santiam Junction (Lane County)	3750	From 11/7 To 12/31	25.44"		
Starr Ridge (Grant County)	5156	From 10/28 To 12/30	4.92"		
Taylor Butte (Klamath County)	5040	From 8/19 To 12/29	5.76"		

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# BASIC DATA SUPPLEMENT 2

JANUARY 1, 1981

## PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precipitation	Last Year	Average <sup>c</sup>
Arbuckle Mountain (Morrow County)	5400	From 9/29 To 12/29	6.90"		
Beaver Reservoir (Union County)	5150	From 10/1 To 1/1	7.00"		
Billie Creek Divide (Jackson County)	5310	From 8/26 To 1/5	14.16"		
Blazed Alder (Clackamas County)	3650	From 10/15 To 12/31	39.24"		
Blue Mountain Springs (Grant County)	5900	From 10/28 To 12/31	9.80"		
Bowman Springs (Union County)	4580	From 9/30 To 12/29	6.40"		
Cascade Summit (Lane County)	4880	From 8/26 To 12/30	29.28"		
Chemult (Klamath County)	4760	From 11/5 To 1/5	9.12"		
Clear Lake (Wasco County)	3500	From 12/2 To 12/29	9.96"		
County Line (Umatilla County)	4800	From 7/23 To 12/29	7.40"		
Daly Lake (Linn County)	3600	From 11/12 To 12/29	24.24"		
Diamond Lake (Douglas County)	4600	From 11/5 To 12/29	17.16"		
Eilertson Meadow (Baker County)	5400	From 8/21 To 12/30	9.00"		
Emigrant Springs (Umatilla County)	3925	From 10/2 To 12/29	10.20"		
Fish Lake (Jackson County)	4665	From 7/22 To 1/5	13.56"		
Gold Center (Grant County)	5340	From 8/7 To 12/30	6.84"		
High Ridge (Umatilla County)	4150	From 8/13 To 12/31	16.32"		
Hogg Pass (Jefferson County)	4755	From 8/20 To 12/31	41.16"		
Holland Meadows (Lane County)	4900	From 11/6 To 12/29	24.36"		
Hyatt Prairie (Jackson County)	4900	From 11/5 To 1/2	5.76"		
Jump Off Joe (Linn County)	3400	From 8/21 To 12/31	39.12"		
King Mountain #2 (Douglas County)	4500	From 11/4 To 12/29	18.72"		
Lake Creek (Grant County)	5120	From 10/28 To 12/31	6.24"		

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

## STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Bully Creek at Warm Springs	7.1	56	Mar.-May		12.6 <sup>b</sup>
Malheur near Drewsey	91	85	Feb.-July		107
	62	85	Apr.-Sept.		73
Malheur, North Fork at Beulah	70	85	Feb.-July		82
	57	85	Apr.-Sept.		67
Owyhee Reservoir net Inflow	430	74	Feb.-July	522	578
	270	69	Apr.-Sept.	388	392
Owyhee at Rome	441	74	Feb.-July		596 <sup>b</sup>
Succor Creek near Jordan Valley	8.7	56	Feb.-July		15.4 <sup>b</sup>

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Owyhee near Rome	2000	May 5	May 14
	1000	May 19	May 28
	500	June 2	June 11

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Beulah Reservoir	60.0	16.3	13.7	19.4
Bully Creek	30.0	12.8	11.0	10.4
Owyhee	715.0	502.0	459.4	372.8
Warm Springs	191.0	129.8	71.2	77.5

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Jordan Creek	1	45	61
Malheur River	4	64	69
Owyhee River	4	77	51

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

## STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Camas Creek near Ukiah	34	82	Mar.-July		42
	28	82	Apr.-Sept.		34
John Day, Middle Fork at Ritter	117	88	Mar.-July		133
	99	88	Apr.-Sept.		113
John Day, North Fork at Monument	511	80	Mar.-July		639
	433	80	Apr.-Sept.		541
Mountain Creek nr. Mitchell	3.2	70	Feb.-July		4.6 <sup>b</sup>
Strawberry near Prairie City	6.2	85	Mar.-July		7.3
	6.5	85	Apr.-Sept.		7.7

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
John Day at Service Creek	190	Aug. 1	Avg. value 212

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
John Day, North Fork	4	70	60
John Day abv. Dayville	3	68	73

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Beaver Creek near Paulina	26	68	Feb.-July		39
	10.4	65	Apr.-Sept.		16.1
Crane Prairie Reservoir total Inflow	96	80	Apr.-Sept.		120
Crescent at Crescent Lake	13.0	65	Mar.-July		20
	14.3	65	Apr.-Sept.		22
Crooked River nr. Prineville	113	70	Feb.-July		161
	63	70	Apr.-Sept.		90
Crooked R., No. Fk. Blw. Lookout Cr. nr. Paulina	10.1	70	Feb.-July		14.5 <sup>b</sup>
Deschutes below Bend	Not forecast this month.				
Deschutes at Benham Falls	338	70	Apr.-July		483
	510	70	Apr.-Sept.		728
Deschutes below Snow Creek	60	80	Feb.-Sept.		75
	54	80	Apr.-Sept.		63
Deschutes, Little near La Pine	73	72	Feb.-July		102
	53	72	Apr.-July		74
Ochoco Reservoir net Inflow	20	70	Feb.-July		29
	11.2	70	Apr.-Sept.		16
Squaw near Sisters	41	84	Apr.-Sept.		49
Tumalo near Bend	38	84	Apr.-Sept.		45

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Crane Prairie net Inflow	334	Peak	
	210	Oct. 31	
	Peak	May 20	
Crooked R. near Post	Not forecast this month.		
Deschutes at Bend	Not forecast this month.		
Little Deschutes nr. La Pine	Not forecast this month.		
Squaw Cr. nr. Sisters	100	Aug. 10	Aug. 16
Tumalo Cr. nr. Bend	235	June 15	June 23
	207	June 17	June 25
	150	June 27	July 5
	71	July 28	Aug. 7

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Crane Prairie	55.3	25.7	17.5	41.2
Crescent Lake	86.9	20.4	21.9	51.9
Ochoco	47.5	28.1	22.0	20.6
Prineville	153.0	96.5	98.8	97.8
Wickiup	200.0	107.4	109.7	134.4

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Crooked, Ochoco	1	0	0
Deschutes abv. Wickiup	1	70	59
Little Deschutes	2	43	24
Tumalo & Squaw Crs.	2	73	58

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

# STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Hood River near Hood River	185	75	Apr.-July		247
	220	75	Apr.-Sept.		293
Hood River, West Fork near Dee	95	75	Apr.-July		127
	112	75	Apr.-Sept.		149
White below Tygh Valley	91	80	Apr.-July		114
	103	80	Apr.-Sept.		129

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Branch Inflow	Not forecast this month.		
White blw. Tygh Valley	200	June 20	July 3
	120	Aug. 1	Avg. value 145

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Clear Lake (Wasco)	11.9	1.1	--	3.9

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Hood River	3	26	18
Mile Creeks	-	--	--
White River	3	26	18

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average C
Sandy River	3	27	20

## STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average C
Columbia at The Dalles	85,864 100,000	97 97	Apr.-July Apr.-Sept.		88,520 103,490
Sandy River near Marmot	263 307	80 80	Apr.-July Apr.-Sept.		329 384

## HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STREAMFLOW <sup>a</sup> (1,000 A F)			REGULATED PEAK (1,000 cfs)	DATE
	APR - SEPT.	APR - JUNE	MAY - JUNE		
1963	87,860	58,499	47,812	437	June 18
1964	110,422	73,512	63,670	662	June 18
1965	114,222	80,098	62,467	520	June 9
1966	87,386	58,250	45,962	396	June 12
1967	109,319	74,378	66,452	622	June 10
1968	89,102	55,593	47,994	404	June 13
1969	112,377	85,742	63,899	515	May 15
1970	88,243	62,993	55,227	425	May 28
1971	126,898	91,781	76,453	557	May 13
1972	135,500	97,041	81,451	619	June 20
1973	65,549	43,765	36,565	221	December 5
1974	139,501	99,035	78,946	588	June 20
1975	108,906	73,018	62,861	422	May 17
1976	122,771	79,084	62,554	418	May 14
1977	54,108	35,505	28,394	213	January 25
1963-77 Avg.	103,478	71,220	58,714	468	

## LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu)	FLOW AT THE DALLES (1,000 cfs)	DRAINAGE DISTRICT PUMPHOUSE						
		SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES						
		118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32 (1972)	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7



## STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Clackamas at Estacada	520	78	Apr.-July		667
	610	78	Apr.-Sept.		782
Clackamas above Three Lynx	395	78	Apr.-July		506
	470	78	Apr.-Sept.		603
McKenzie at McKenzie Bridge	384	85	Apr.-July		452
	508	85	Apr.-Sept.		598
McKenzie near Vida	870	85	Apr.-July		1024
	1070	85	Apr.-Sept.		1259
McKenzie, So. Fork near Rainbow	176	85	Apr.-July		207
	199	85	Apr.-Sept.		234
Mohawk River near Springfield	146	88	Feb.-July		166
Oak Grove Fork above Power Intake	106	80	Apr.-July		132
	134	80	Apr.-Sept.		168
Row near Dorena	78	80	Apr.-July		98
	83	80	Apr.-Sept.		104
Santiam, North at Mehama	616	82	Apr.-July		752
	705	82	Apr.-Sept.		860
Santiam, South at Waterloo	454	83	Apr.-July		547
	490	83	Apr.-Sept.		590
Scoggins Creek nr. Gaston	374	85	Feb.-July		44
Thomas Creek near Scio	136	85	Feb.-July		160
Willamette, Coast Fork nr. London	22	80	Apr.-July		27
Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge	583	86	Apr.-July		678
	667	86	Apr.-Sept.		776
Willamette, No. Fk. of Mid. Fk. near Oakridge	160	85	Apr.-July		188
	178	85	Apr.-Sept.		209
Willamette at Salem	4039	86	Apr.-Sept.		4697

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Clackamas River	2	0	0
McKenzie River	3	77	27
Row River	2	0	0
Santiam River	4	41	11
Willamette, Mid. Fk.	3	42	15

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Blue River	85.6*	12.8	0.2	1.1 <sup>b</sup>
Cottage Grove	30.0*	0.3	0.3	1.2
Cougar	155.2*	24.2	0	12.0 <sup>b</sup>
Detroit	299.9*	109.2	5.0	31.6
Dorena	70.5*	1.0	0.4	4.4
Fall Creek	115.0*	1.0	0.9	0.0 <sup>b</sup>
Fern Ridge	94.2*	13.2	0.9	8.2 <sup>b</sup>
Foster	30.0*	0.3	1.0	0.5 <sup>b</sup>
Green Peter	270.0*	89.7	6.5	22.5 <sup>b</sup>
Hills Creek	200.0*	36.8	0.4	14.5
Lookout Point	337.2*	48.2	6.1	29.2
Timothy Lake	61.7	46.5	29.4	52.4
Henry Hagg Lake	53.0	35.1	28.7	--
* Multiple purpose reservoir--space reserved primarily for flood runoff.				

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

# STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Applegate near Copper	84	65	Apr.-Sept.		129
Clearwater above Trap Creek	60	85	Apr.-Sept.		71
Cow Creek nr. Azalea	28	65	Feb.-July		43
Fourmile Lake net Inflow	2.7	70	Apr.-Sept.		3.9
Grave Creek at Pease Bridge nr. Placer	15.1	72	Feb.-July		21
Hyatt Reservoir net Inflow	3.4	70	Apr.-July		4.9
Illinois River near Kerby	114	65	Apr.-July		176
	119	65	Apr.-Sept.		183
Little Butte, N. Fk. at Fish Lake nr. Lake Cr.	11.9	85	Apr.-Sept.		14.0
Little Butte, S. Fk. near Lake Creek	28	82	Apr.-Sept.		34
Red Blanket Creek nr. Prospect	28	80	Apr.-July		35
Rogue above Prospect	211	82	Apr.-July		257
Rogue, South Fork near Prospect	51	82	Apr.-July		62
	61	82	Apr.-Sept.		74
Rogue at Raygold near Central Point	570	80	Apr.-July	594	756
	597	80	Apr.-Sept.	728	919
Rogue at Grants Pass	493	80	Apr.-July		759
	590	80	Apr.-Sept.		908
Sucker Cr. blw. Little Grayback nr. Holland	41	70	Apr.-July		58
Umpqua, No. blw. Lemolo Lake, nr. Toketee Falls	139	82	Apr.-Sept.		170
Umpqua, No. at Winchester	614	80	Apr.-July		768
Umpqua, So. near Brockway	266	70	Apr.-July		380
Umpqua, So. at Tiller	130	71	Apr.-July		183
So. Fk. Big Butte Cr. nr. Butte Falls	31	85	Apr.-July		37

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Cow Creek nr. Azalea	20	June 27	July 4
	10	Aug. 9	Aug. 19
Little Butte Creek, South Fork	100	May 7	May 15
South Umpqua near Brockway	90	July 23	July 30
South Umpqua at Tiller	140	July 2	July 10
	90	July 23	July 30
	60	Aug. 16	Aug. 27

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Emigrant Lake	39.0	20.7	16.2	18.9
Fish Lake	8.0	4.0	5.2	5.6
Fourmile Lake	16.1	4.6	6.2	9.0 <sup>b</sup>
Howard Prairie	60.0	43.8	48.6	41.7
Hyatt Prairie	16.1	10.5	11.4	10.9
Lost Creek	315.0	144.4	--	--

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Applegate	-	-	-
Bear Creek	1	0	0
Butte Creek	4	14	11
Illinois River	-	-	-
North Umpqua	3	12	5
Rogue River	2	24	14
Mt. Ashland	1	0	0

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Clear Lake Reservoir Inflow	55	60	Feb.-July		92
Gerber Reservoir Inflow	26	63	Feb.-July		41
Sprague near Chiloquin	206	60	Feb.-Sept.		344
	145	60	Apr.-Sept.		242
Upper Klamath Lake net Inflow	614	70	Feb.-Sept.	676	877
	368	70	Apr.-Sept.	361	526
Williamson below Sprague River	386	65	Feb.-Sept.		594
	266	65	Apr.-Sept.		409

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Clear Lake	440.2	149.3	104.6	203.2
Gerber	94.0	27.9	15.2	46.0
Upper Klamath Lake	584.0	303.5	302.1	350.7

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Lost River	1	0	0
Sprague River	2	12	19
Upper Klamath	5	21	18
Williamson River	3	27	18

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



## STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Chewaucan near Paisley	64	73	Mar.-July	82	88
Cottonwood Creek nr. Lakeview	7.0	60	Mar.-July		11.6
Deep above Adel	64	80	Mar.-July		80
Drews Reservoir net Inflow	24	60	Mar.-July		41
Honey Creek near Plush	15.7	75	Mar.-July		21
Silver Creek near Silver Lake	8.5	60	Apr.-July		14.1
Twentymile near Adel	20	76	Mar.-July		26
Bridge Cr. nr. Spahr Ranch nr. Silver Lake	2.1	62	Apr.-July		3.4

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Deep Cr. above Adel	Not forecast this month.		
Honey Cr. nr. Plush	100 50	May 7 May 22	May 15 May 30
Twentymile nr. Adel	Not forecast this month.		

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Cottonwood	8.7	N/R	0.9	2.1 <sup>b</sup>
Drews	63.0	29.6	14.7	34.3
Thompson Valley *	19.5	15.5	--	9.2 <sup>b</sup>
*Dec. 9 reading				

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Chewaucan River	2	12	19
Deep Creek	1	0	0
Drew Creek	1	0	0
Honey Creek	1	0	0
Silver Creek	2	22	28
Twentymile Creek	--	--	--

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

# STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average C
Donner und Blitzen near Frenchglen	50	85	Mar.-July		59
	48	85	Apr.-Sept.		57
Silver near Riley	12.6	80	Apr.-July		15.8
Silvies River near Burns	82	85	Mar.-July		96
	65	85	Apr.-Sept.		77
Trout Creek near Denio	6.5	70	Mar.-July		9.3

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Silvies nr. Burns	400	May 1	May 5
	200	May 16	May 21
	100	June 4	June 9
	50	June 18	June 23
Donner und Blitzen	200	June 10	June 15
	100	July 1	July 5
<hr/>			
	<u>GAGE HEIGHT</u>	<u>SURFACE ACRES</u>	<u>AVG. SURFACE ACRES</u>
Malheur Lake at Break in Cole Island Dike near Voltage			
	July 1 93.04	36,800	40,000
	Aug. 1 92.59	29,400	33,000

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average C
Donner und Blitzen R.	1	0	0
Silver Creek	-	-	-
Silvies River	4	59	68
Trout Creek	-	-	-

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.









# The Following Organizations Cooperate in the Oregon Snow Survey Work

## STATE

*Idaho Cooperative Snow Surveys*  
*Nevada Cooperative Snow Surveys*  
*Oregon State University*  
*Oregon Department of Water Resources*  
*Soil and Water Conservation District of Oregon*

## COUNTY

*Douglas County Water Resources Survey*

## FEDERAL

*Department of Agriculture*  
*Cooperative Extension Service*  
*Forest Service*  
*Soil Conservation Service*  
*Department of Army*  
*Corps of Engineers*  
*Department of Commerce*  
*NOAA, National Weather Service*  
*Department of Energy*  
*Bonneville Power Administration*  
*Department of the Interior*  
*Bureau of Land Management*  
*Fish and Wildlife Service*  
*Geological Survey*  
*Water and Power Resources Service*

## PUBLIC UTILITIES

*Pacific Power and Light Company*  
*Portland General Electric Company*  
*California-Pacific National*

## MUNICIPALITIES

*City of Baker*  
*City of La Grande*  
*City of Portland*  
*City of The Dalles*  
*City of Walla Walla*

## IRRIGATION DISTRICTS

*Arnold Irrigation District*  
*Associated Ditch Companies*  
*Burnt River Irrigation District*  
*Central Oregon Irrigation District*  
*East Fork Irrigation District*  
*Grants Pass Irrigation District*  
*Hood River Irrigation District*  
*Jordan Valley Irrigation District*  
*Juniper Flat Irrigation District*  
*Lakeview Water Users, Incorporated*  
*Medford Irrigation District*  
*Middle Fork Irrigation District*  
*North Board of Control - Owyhee Project*  
*Ochoco Irrigation District*  
*Rogue River Valley Irrigation District*  
*South Board of Control - Owyhee Project*  
*Squaw Creek Irrigation District*  
*Talent Irrigation District*  
*Tumalo Project*  
*Vale - Oregon Irrigation District*  
*Warm Springs Irrigation District*

## PRIVATE ORGANIZATIONS

*The Crag Rats, Hood River, Oregon*

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*"The Conservation of Water begins  
with the Snow Survey"*

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